

WHAT IS CLAIMED IS:

1. A hollow shock absorbing member, which is plastically deformed for absorbing axial load, wherein the shock absorbing member includes an initial buckling portion at which plastic deformation due to axial load starts.
2. A vehicle bumper comprising:
 - a bumper reinforce;
 - a hollow crash box, which extends from the bumper reinforce, wherein the crash box has a first end, which is coupled to the bumper reinforce, and a second end, which is coupled to the vehicle body, and wherein, when receiving axial load, the crash box is plastically deformed to absorb the axial load; and
 - an initial buckling portion, which is previously formed in the crash box, wherein plastic deformation of the crash box due to axial load starts at the initial buckling portion.
3. The bumper according to claim 2, wherein the bumper reinforce extends laterally relative to the vehicle, and wherein the crash box extends along the front-rear direction of the vehicle.
4. The bumper according to claim 2, wherein the initial buckling portion is close to the first end of the crash box.
5. The bumper according to claim 2, wherein the initial buckling portion extends along the entire circumference of a predetermined portion in the axial direction of the crash box.
6. The bumper according to claim 2, wherein the crash box is one of a pair of crash boxes, each of which is located at one end of the bumper reinforce.

7. A method for manufacturing a hollow shock absorbing member, which is plastically deformed for absorbing axial load, comprising:

5 preparing a hollow material that has a constant cross section in the axial direction; and

10 applying axial load to the hollow material until the hollow material is plastically deformed so that a buckling portion is formed at any position in the axial direction of the hollow material, wherein the hollow material, which has the buckling portion, is used as the shock absorbing member, and wherein plastic deformation of the shock absorbing member due to axial load starts at the buckling portion.

8. The method according to claim 7, wherein the hollow
15 material is formed by extruding metal.